

TOP SECRET

OUT 66749

25X1

AFSSO PACAF
AFSSO ACIC
AFSSO FTD
AFSSO USAFE
CNO
OPCEN
FICENR

ZEM
TOP SECRET TTTT [REDACTED] CITE WPIC 5587
[REDACTED] ALSO FOR 544 ARTW.

3 JAN 69 02 32Z

DISTRIBUTION		
CV	OFFICE	BY
1	FILE	
	CARLE 125X1	
	PPG/CPD	
	CELEA 25X1	
	ESSE 25X1	
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ADVANCE CY
SANITIZED
WITH TEXT

A. MAIN UNITS		FORWARD	AFT	STAR HOR	PORT HOR
FOCAL LENGTHS					
(MM)	609.628	609.602	FWD 54.87%	FWD 54.65%	
			AFT 54.85%	AFT 54.95%	

FILTER		APERTURE		SLIT WIDTH (IN)		EXPOSURE (SEC)		FILM		RESOLUTION (L/CM)	
(WRATTEN NR.)	23A	21	25								
APERTURE	F3.5	F3.5	F4.5								
SLIT WIDTH (IN)	.165	.135	NA								
EXPOSURE											
(SEC)	1/100	1/100	NA								
FILM	27JC-5	27JC-5	3404								
RESOLUTION											
(L/CM)	131	200	NA								

B. S/I UNITS		NA	NA
FOCAL LENGTH (MM)		STELLAR	INDEX
PART 1		83.8251	33.6062
PART 2		84.1965	33.6342

FILTER	34-1989	33-3349
(WRITTEN NR)	NONE	21
APERTURE	F1.8	F4.5
EXPOSURE		
(SEC)	1.0	PART 1 1/417,
		PART 2 1/222
FILM	3421	3422

RESOLUTION	PART	1	---	77
CL/AM	PART	2	--	83
UNIT NUMBER	PART	1	123/157/182	
	PART	2	124/158/185	

3. LENS DISTORTION (PIN CUSHION) MM

A.	MAIN UNITS	3	2	1	0	359	358	357
	FWD UNIT	.002	.001	0	0	0	.001	.000
	AFT UNIT	.002	.001	0	0	0	.001	.000

B. HORIZON CAMERAS (MM)	FWD	APT	
(RADIAL) 10 DEGREES	.030	.010	.030
20 DEGREES	.090	.050	.090

25X1

TOP SECRET

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(TANGENTIAL)

MAX VECTOR .014 .15 .024 .030

4. CAMERA ANGLES DEG. MIN.

A. ANGLE BETWEEN PAN CAMERAS 29 46.3

B. DEPRESSION ANGLE BETWEEN HORIZON AND PAN CAMERAS

FWD	STAR	14	54.5
FWD	PORT	14	23.0
AFT	STAR	15	50.0
AFT	PORT	15	12.5

C. ANGLE BETWEEN STELLAR AND INDEX CAMERAS

PART 1	89 DEG.	57.6
PART 2	89 DEG.	53.8

5. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

6. IMAGE MOTION COMPENSATION DATA (CYCLE RATE (CPS), GROUND ANGULAR VELOCITY (GAV), AND PASSED WHERE USED).

REF LEVEL		AMPL. LEVEL		PASSES
PART 1	NO. CPS. GAV.	NO. CPS. GAV...		
	2 .3944 .0357	7 .0593 .0054		10, 250 THRU 420
	3 .3839 .0347	7 .0593 .0054		50, THRU 100, 520 THRU 660
	3 .3839 .0347	6 .0734 .0066		160, THRU 230
	3 .3839 .0347	8 .0444 .0040		470 THRU 480
	3 .3839 .0347	11 0 0		680 THRU 700
	1 .4038 .0365	11 0 0		710, 730 THRU 740, 900
	2 .3944 .0357	11 0 0		720
	5 .3619 .0327	11 0 0		810 THRU 860
	4 .3731 .0337	11 0 0		870, 880
PART 2	1 .4038 .0365	11 0 0		910 THRU 950, 990 THRU 1200, 1270 THRU 1700
	2 .3944 .0357	11 0 0		970
	4 .3731 .0337	11 0 0		1200

7. PROGRAM TIME DATA

PASS	DAY	CAMERA ON TIME (ZULU TIME)			PROGRAM ON TIME UP RAMP		PROGRAM DURATION SEC
		HR	MIN	SEC	SEC	SEC	
10	12	23	50	00	1265	38	
50	13	05	44	23	1092	97	
60 1	13	07	13	09	1083	76	
60 2	13	07	22	32	1042	104	
70 1	13	08	42	06	1107	52	
70 2	13	08	46	03	1343	119	
90A	13	11	18	43			
90	13	11	41	25	1227	69	
100	13	13	08	31	1128	122	
160	13	22	05	42	1428	49	
210	14	05	23	46	1126	203	
220	14	06	53	48	1203	209	
230 1	14	08	23	41	1293	45	
230 2	14	08	27	21	1514	57	

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25D	14	11	29	41	1692	57
26D	14	12	47	45	1059	122
30D	14	19	00	53	2174	59
31D	14	20	14	50	1294	54
37D	15	05	01	42	1025	281
38D 1	15	06	30	27	1036	356
38D 2	15	06	38	23	1512	103
39D 1	15	08	00	59	1153	108
39D 2	15	08	05	30	1424	49
40D 1	15	09	28	22	1052	45
40D 2	15	09	30	43	1223	34
41D 1	15	10	56	25	1052	65
41D 2	15	10	59	41	1247	86
42D	15	12	25	57	1109	242
47D 1	15	19	53	00	1493	25
47D 2	15	19	55	03	1515	58
48D	15	21	23	58	1626	27
52D	16	03	11	55	1233	27
53D	16	04	40	52	1250	264
54D 1	16	06	11	24	1331	279
54D 2	16	06	16	41	1676	141
55D 1	16	07	39	48	1344	60
55D 2	16	07	41	38	1454	98
55D 3	16	07	45	31	1607	58
56D	16	09	06	56	1250	78
57D	16	10	39	37	1491	92
58D	16	12	35	22	1317	154
59D	16	13	41	38	1775	57
63D	16	19	34	22	1656	60
64D	16	21	01	50	1506	27
68D	17	02	51	49	1296	114
69D	17	04	20	03	1271	237
70D 1	17	05	51	21	1432	126
70D 2	17	05	56	44	1750	72
71D	17	07	22	33	1588	178
72D 1	17	08	45	58	1274	143
72D 2	17	08	50	14	1530	51
73AE	17	09	55	33	103	43
73D	17	10	17	18	1436	89
74D 1	17	11	43	24	1289	264
74D 2	17	11	50	17	1701	153
81D	17	22	10	55	1701	36
83D	18	01	12	01	1919	25
85D	18	03	59	43	1353	164
86D	18	05	29	05	1403	269
87D 1	18	06	57	59	1423	63
87D 2	18	07	01	41	1044	241
88D	18	08	30	56	1683	55
90D	18	11	28	34	1717	161
91AE	18	12	35	55	0	23
91D	18	13	02	29	2036	72
95D	18	18	52	59	1779	26
97D	18	21	50	34	1788	36
99D	19	01	41	51	0	23
100D	19	02	07	43	1235	175
102D	19	05	10	52	1584	97
103D 1	19	06	36	58	1429	106
103D 2	19	06	41	49	1720	188
104D 1	19	08	07	03	1517	57
104D 2	19	08	09	24	1653	46
106D	19	11	08	15	1746	159
111D	19	18	34	14	1913	41

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113D	19	21	27	26	1668	37
117D1	20	03	18	09	1422	95
117D2	20	03	20	41	1574	28
119D1	20	06	14	12	1351	106
119D2	20	06	17	48	1507	541
120D	20	07	44	56	1477	340
121D	20	09	15	12	1457	257
122D1	20	10	42	37	1505	93
122D2	20	10	45	45	1694	124
123D	20	12	20	41	2074	110
126D	20	16	54	21	2551	77
127D	20	18	08	49	1704	25
129D	20	21	05	31	1679	26

134D	21	04	26	05	1530	180
135D1	21	05	52	09	1381	118
135D2	21	05	57	00	1675	339
136D1	21	07	21	32	1430	126
136D2	21	07	24	16	1593	53
136D3	21	07	26	05	1702	163
137D1	21	08	51	02	1467	106
137D2	21	08	53	30	1635	118
138D1	21	10	19	46	1492	75
138D2	21	10	31	59	2225	64
139D	21	11	50	00	1585	69
145D	21	20	44	36	1732	27
150D	22	04	02	52	1408	297
151D	22	05	34	52	1607	401
152D1	22	07	02	58	1575	116
152D2	22	07	05	52	1749	154
153D	22	08	31	54	1592	45
154D1	22	10	09	25	2127	49
154D2	22	10	11	03	2224	48
155D1	22	11	29	21	1604	125
155D2	22	11	34	06	1889	155
155D3	22	11	45	49	2592	104
156D	22	13	00	44	1769	63
161D	22	20	25	52	1770	95
166D1	23	03	42	53	1519	43
166D2	23	03	44	59	1645	50
167D1	23	05	09	04	1374	240
167D2	23	05	14	28	1699	310
168D1	23	06	41	29	1602	128
168D2	23	06	45	12	1825	95
169D1	23	08	07	11	1430	103
169D2	23	08	11	41	1701	28
170AE	23	09	16	15	262	44

NOTE: ABOVE DATA APPLIES TO FWD UNIT ONLY. ADD 12 SECONDS TO OBTAIN START TIMES OF AFT UNIT.

NOTE: PART 2 STARTS WITH PASS 91AE.

B. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
9	12244.930	40520.3284	
16	5113.042	79388.4344	.002
25	97408.496	39283.8814	.011
32	136245.394	73120.7735	.006
41	182501.923	37977.2956	.007
48	221359.482	75634.8487	.006

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57	267672.047	36747.4067	.007
64	306594.638	75669.9919	.006
73	352808.072	35483.4189	.007
81	397013.525	79688.8653	.007
89	437982.357	34257.6912	.006
97	482190.060	73465.3856	.009
106	528434.907	38310.2255	.007
113	30411.965	77158.1390	.005
122	76886.431	37032.6466	.007
129	115506.569	75852.7807	.006
138	161752.063	35698.2677	.007
145	200623.556	74569.7548	.006
154	246920.076	34466.2679	.007
161	285760.791	73306.9771	.006
170	332016.682	33162.8612	.007

NOTE: ALL "DIFFERENCE" VALUES ARE PLUS

NOTE: BOTH 1049-1 AND 1049-2 ARE INCLUDED IN THIS
MESSAGE. PART 2 STARTS WITH PASS 91AE.
GP-1

TOP SECRET

END OF MESSAGE

(NOTE: ABOVE MESSAGE ALSO PASSED

25X1